

New Dutch East Indian Lamiinae (Col., Cerambycidae)

by

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The following new species are for the major part from islands in the Dutch East Indian Archipelago. The types are in the British Museum (Natural History) or in my own collection.

The second half of this paper deals with a number of new species of *Tmesisternini*, a tribe which has the genera *Tmesisternus* Latr., and *Trigonoptera* Pasc., as its largest members. These two genera are extremely widely distributed throughout the East Indies, but there are numerous gaps in this, particularly from some of the lesser known islands. I would therefore, like to appeal to all collectors out there, or even those with small collections of material from this region, to send it in for examination, so that our knowledge of the tribe may be perhaps increased.

Agnia eximia Pasc. var. ***abasomaculata*** nov.

This very distinct variety differs noticeably from the typical form in lacking the median longitudinal pronotal band, which is reduced to a very small anterior spot, and the two lateral bands do not reach the posterior margin; all the white markings on the basal half of the elytra in front of the premedian band are missing, and the remaining spots tend to be as in *ab. albofasciata* Breun., where they are united to form transverse bands.

Length, 15.5 mms., breadth, 5.8 mms.

Ternate. HOLOTYPE (♂) in my collection. Unique.

Triammatus waigeuensis sp. nov.

Male: Black, covered with pale brownish pubescence, which is more or less uniform. Head and pronotum almost immaculate above, the latter with a narrow, very vague, slightly lighter brown longitudinal band on each side of the disc. The elytra with about four very small velvety dark brown spots, (which may be partially united, or slightly subdivided) on each elytron, one pair at about the basal third, and the other pair immediately behind the middle;



Fig. 1.
Agnia eximia
basaomaculata
Pasc. var.
nov ♂ (× 52).

a few irregular, less distinct, smaller spots apically along the suture and at the apex. The underside covered with greyish-brown pubescence, with a densely pubescent white lateral longitudinal band extending from the lower lobes of the eyes as far as the posterior border of the metasternum.

Elongate, moderately robust.

The antennae one and a half to one and three-quarter times as long as the body; with a few very sparse hairs beneath on the basal segments; the scape fairly elongate, bearing a large distinct complete apical cicatrix, about one and a third times as long as the



Fig. 2.
Triammatus
waigeuensis
sp. nov. ♂ (×4.5).

fourth segment, which is about equal in length to the scape; the third, fourth and fifth segments very strongly swollen apically; all the segments very finely and closely punctured, the scape with a number of scattered larger punctures. The antennal tubercles strongly lobularly prolonged vertically, very closely approximated. The lower lobes of the eyes as broad as long; about as long as the genae. The frons strongly trapezoidal; the whole head fairly finely and closely punctured, with a number of larger scattered punctures on the vertex, and more closely on the upper part of the frons. The prothorax transverse, with a slender, pointed spine in the middle of each side; with two anterior and two posterior transverse grooves, of which the median two are the strongest; the disc very finely transversely rugose; a number of conspicuous granules laterally and at the base of the spines; the whole very finely and closely punctured. The scutellum slightly transverse, broadly rounded apically; finely and closely punctured. The elytra elongate; broad basally, distinctly attenuate to the apices which are broadly rounded; covered densely with quite large, distinct granules on the basal quarter, these becoming smaller there and changing to large distinct, fairly well-separated punctures, which gradually become finer towards the apex; the interstices closely micropunctate.

The underside completely very finely and closely punctured; the prosternal protuberance not as high as the coxae, regularly rounded; the mesosternal protuberance with a broad, distinct, large obtuse tubercle, and vertically truncate anteriorly. The apical ventrite about twice as long as the preapical, and truncate apically. The legs of moderate length, with the anterior distinctly elongate; the femora moderately claviform; the anterior tibiae with a strong spinous tubercle internally; the intermediate tibiae with an external groove, limited proximally at the middle by a distinct tubercle; all finely and closely punctured, with sparse larger punctures scattered here and there; the tarsi rather broad, with long lateral hairs. Length, 18.5—21 mms., breadth, 6—7 mms.

Waigeu. HOLOTYPE (♂) and PARATYPE (♂) in my collection.

This very distinct new species appears to be rather smaller than

the other species of the genus. It is most closely allied to the male of *T. tristis* Pasc., in general fascies, but differs conspicuously in colours, the latter species having a complete leaden-grey pubescence, with larger black maculae.

Pericycos teragramus sp. nov.

Completely black. The head with yellow maculae as follows : an elongate one on each side of the frons ; a rounded one on each gena, and a large one on the vertex. The tibiae, tarsi and first six antennal segments covered with fine sparse greyish pubescence ; the apical five antennal segments covered with fine, sparse brownish pubescence. The pronotum, the scutellum, the underside, the femora and the extreme elytral apex covered with pale ochraceous-yellow pubescence, except the middle of the ventrites which are black and glabrous ; this pubescence most dense on the metasternum and the ventrites laterally. The elytra covered with variably confluent, metallic green or bluish maculae, with shining black granules, and the interstices glabrous black and shining.

Male : Moderately robust and elongate. Antennae robust, about one and a fifth times as long as the body, with a few very sparse setae below on the basal segments ; the scape moderately elongate, with a complete apical cicatrix ; the third segment about one and a seventh times longer than the fourth, about one and a third times as long as the scape ; the following segments gradually decreasing ; the third to sixth segments with a small preapical depression externally ; all the segments very finely and fairly closely punctured. The frons trapeziform, moderately and fairly closely punctured ; the genae a little more coarsely punctured ; the vertex sparsely punctured laterally ; the antennal tubercles moderately raised, and fairly closely approaching. The pronotum very slightly transverse (about 28 : 25) ; narrowed apically, slightly rounded laterally, with an extremely small infero-lateral tubercle on each side ; trilobed basally ; with two anterior and two posterior transverse grooves, each pair widely separated, and the inner of each pair strongly medially sinuate on the disc, with a rather distinct depression at the middle of each ; the whole completely covered with close, small, shining black granules, the interstices extremely finely and sparsely punctured. The scutellum slightly transverse, subtriangular, narrowly rounded apically ; micropunctate. The elytra elongate, convex ; each with a strong basal rounded lobe projecting anteriorly on each side of the scutellum, and with two slightly raised, obtuse longitudinal carinae on about the apical two-thirds ; covered with fairly fine shining granules, which are closest basally, and change to sparse punctures suturally ; the interstices irregularly, finely micropunctured.

The underside very finely punctured, closely laterally, rather less close medially, particularly on the ventrites. The prosternal protuberance moderately broad, about as high as the coxae, rounded anteriorly, more or less vertically truncate posteriorly. The mesosternal protuberance bearing a very large, strongly anteriorly projecting

tubercle. The apical ventrite slightly truncate apically. The legs of moderate length; the femora scarcely swollen, almost linear; the intermediate tibiae grooved externally; the tarsal segments broad, with long black lateral setae.

Female: Distinctly more robust than the male. (The antennae broken from the fourth segment, but probably about as long as the body). The apical ventrite rather strongly emarginate apically, and bearing a long dense tuft of black hairs on each side. The tarsi not as broad as in the male, and with much shorter lateral setae.

Length, 19—24 mms., breadth, 6.5—9 mms.

Sarawak: Mt. Merinjak (Allotype) and Sarawak (No further data) (Holotype). HOLOTYPE (♂) in my collection. ALLOTYPE (♀) in the British Museum (Nat. Hist.).

This new species is most closely allied to *P. princeps* Pasc., from which it can be immediately distinguished by the elytral sutural spots not being yellow and the labrum not yellow. It may be separated from the other species as shown in the following key.

Key to the Genus *Pericycos* Breun.

1. The elytra covered with metallic green confluent spots 2
- The elytra covered with ochraceous spots 3
2. The labrum yellow pubescent; the elytral sutural spots yellow *princeps* Pascoe
- The labrum black; elytral sutural spots metallic green, like the rest *teragramus* sp. n.
3. The pronotum as long as broad, bearing a very small lateral tubercle; the base of the elytra with a triangular projection *philippinensis* Breun.
- The pronotum transverse; the base of the elytra with a rounded projecting lobe 4
4. The lateral pronotal spine distinct; the elytra with granules over their whole length, except suturally *guttatus* Heller
- The lateral pronotal spine scarcely distinguishable; the elytra only granular on the basal third *varieguttatus* Schwarz.



Fig. 3.
Cyldrepomus
peregrinus Pasc.,
var. *connexa* nov.
♂. a. holotype;
b. paratype.

Cyldrepomus peregrinus Pasc., var. *connexa* nov.

This variety differs from the typical form in its elytral markings. In long series the typical form is found to be very constant, but in this variety the second and third transverse greyish fascia are connected or almost connected, by a distinct prolongation from each band medially.

The holotype (fig. 3a) has the black pronotal markings very small and inconspicuous, while in the paratype (fig. 3b) they are very enlarged and coalesced to form a large lateral longitudinal macula on each side. As these vary considerably from specimen to specimen in typical series, no varietal importance can be attached to this difference.

Length, 9.5—14 mms., breadth, 2—3.5 mms.

Java (No further data). HOLOTYPE (♂) and PARATYPE (♂) in the British Museum (Nat. Hist.).

Cylindrepomus grammicus Pasc., var. *waigeuensis* nov.

This new variety is distinctly different from the typical and other forms of the species in the elytral sutural longitudinal yellowish band being divided, and missing from about the middle to about the apical third or quarter. (This is not due to 'rubbing' as it is constant in all the specimens examined). The pronotal longitudinal bands are narrow as in the typical form, and the holotype lacks the longitudinal bands on the vertex as in subsp. *hecate* Dillon & Dillon, but these are fairly distinct, though very narrow on the other specimens.

Length, 16—16.5 mms., breadth, 3.2—3.5 mms.

Waigeu : Camp Nok, 2,500 ft. (April, 1938, L. E. Cheesman) (Holotype and 1 paratype). Waigeu (No further data) (Paratype). HOLOTYPE (♂) and 2 PARATYPES (♂) in the British Museum (Nat. Hist.)

One paratype has the right antenna missing from the scape, and the other has both antennae missing from the scape, although the latter is in better condition than the others as regards pubescence.



Fig. 4.
Cylindrepomus
grammicus
Pasc., var. *wai-*
geuensis nov. ♂.

Amblymora V-flava sp. nov.

Female : Moderately robust, elongate.

Dark brown ; completely covered above and below with more or less uniform brownish pubescence, which is somewhat greyish-brown towards the elytral apex, where there are also a few small irregular glabrous areas. On each elytron there is a pale yellow, oblique, very narrow fascia on the disc, extending from the basal sixth behind the humerus, and less laterally, to the suture at the basal third, forming a broad V with that of the opposite elytron. The ventrites irregularly glabrous medially with grey apically and basally.

The antennae about one and a seventh times as long as the body ; slender ; fairly densely fringed beneath, except the scape, and the apical two segments much more sparsely ; the scape rather elongate, subcylindrical ; the third segment elongate, almost twice as long as the fourth ; the fifth shorter than the third ; the rest gradually decreasing, except the apical which is again slightly elongate ; all the segments very finely and closely punctured. The antennal tubercles very slightly raised, widely separated. The

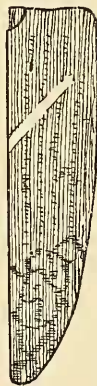


Fig. 5.
Amblymora v-
flava sp. nov. ♀.

eyes strongly emarginate, rather closely approaching above; the lower lobes large, slightly elongate, about four times as long as the genae. The frons distinctly elongate, slightly convex, with a very fine median longitudinal groove from the upper part, extending to the posterior border of the head; very strongly and fairly closely, coarsely punctured; the interstices and the vertex closely micropunctured. The prothorax slightly transverse; with a small, very pointed lateral tooth slightly behind the middle on each side; rather strongly convex, and rounded laterally; narrowed anteriorly; the disc completely covered with very large, quite close, coarse punctures which become rather smaller infero-laterally; the interstices closely micropunctured; with a very slight basal transverse broad groove. The scutellum slightly transverse, subtriangular, narrowly rounded apically; closely micropunctured. The elytra elongate; rather strongly convex; distinctly attenuate, but slightly rounded to the apex; the apices rather narrow, obsoletely, and slightly obliquely truncate, the sutural and marginal angles rounded; each elytron with four fairly distinct, but obtuse, longitudinal carinae; coarsely and fairly closely punctured basally, then seriatly punctured, with a single row between each carina, and more irregularly laterally, becoming much finer apically.

The underside completely, fairly closely micropunctured. The prosternal protuberance broad, as high as the coxae; transversely and vertically truncate posteriorly. The mesosternal protuberance broader than the prosternal; very slightly concave, but almost transversely truncate, and vertically truncate anteriorly. The apical ventrite about one and a half times as long as the preapical; truncate apically; (the ovipositor slightly more than twice as long as the apical ventrite). The legs of moderate length; slender; the femora clavate; (Pascoe in his generic description states 'fusiform', but the broadest point is not median, but distal!); the intermediate tibiae grooved externally; all very finely and closely punctured; the tarsi elongate and slender, and all the segments about equal in length.

Length, 10 mms., breadth, 3.5 mms.

Aru. HOLOTYPE (♀) in the British Museum (Nat. Hist.).

This new species is probably most closely allied to *A. fumosa* Pascoe, but differs conspicuously from that species and all the other known species of the genus in the pale oblique yellow band on each elytron, as well as minor differences.

PASCOE mentions (1867, Trans. Ent. Soc. Lond. (3) 3 456) under his species *consputa*, (to which the above newly described species shows distinct affinities), a slightly different specimen from Aru, but I have not been able to discover a specimen under this species in the British Museum (Nat. Hist.) which agrees with *v-flava* Gilmour from the same island.

TMESISTERNINI Thomson.*Trigonoptera immaculata* sp. nov.

Male : Rather small compared to the other species ; elongate.

Pitchy-brown ; covered above with thin brownish pubescence ; the frontal groove and ocular margins very sparsely whitish pubescent ; on each side of the pronotum an obscure brownish-ochraceous irregular macula ; the elytra almost uniformly pubescent, with slight lighter brown patches apically ; the underside, legs and antennae thinly greyish pubescent.

The antennae a little more than a seventh longer than the body (the eleventh segment is missing) ; slender ; sparsely fringed beneath ; the scape more or less elongate, subcylindrical ; the third segment slightly sinuate, elongate, about one and a third times as long as the fourth segment, and about one and a half times as long as the scape ; the rest gradually decreasing. The antennal tubercles scarcely raised, almost flat. The frons very slightly trapeziform and slightly transverse, with a distinct, fine, median longitudinal groove, which extends to the posterior border of the head ; the whole head very finely and closely punctured. The eyes strongly emarginate, the lower lobes large, slightly transverse, about three times as long as the genae. The pronotum about one and a half times as broad as long ; convex ; trilobed basally ; bearing a small spine laterally on each side a little behind the middle ; finely, moderately closely punctured, more closely apically, with a narrow median longitudinal impunctate region. The elytra elongate, attenuate to the apex ; the apex slightly emarginate, the sutural angle spinous, the marginal angle shortly spined ; the whole covered with moderately large, not very close punctures, which become slightly smaller to the apex.

The underside completely very finely, and fairly closely punctured ; the prosternal protuberance broad, as high as the coxae, truncate posteriorly and rather strongly posteriorly projecting ; the mesosternal protuberance broad, bilobed anteriorly ; the apical ventrite a little longer than the preapical ; rather narrowly truncate apically. The legs of moderate length ; the femora claviform ; the intermediate tibiae grooved ; all very finely and closely punctured ; the tarsi moderately elongate.

Length, 8 mms. breadth, 2.8 mms.

Japen Island (= Jobi Island). HOLOTYPE (♂) in the British Museum (Nat. Hist.), unique.

This is the smallest species of the genus now known. It is perhaps most closely allied to *T. obscura* Gilmour, in being similarly almost immaculate, but differs from that species in lacking the long

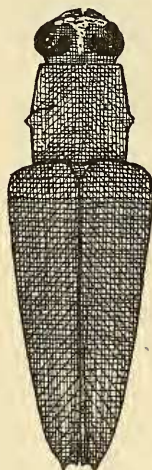


Fig. 6.
Trigonoptera im-
maculata sp. nov.
♂ (× 8.4).

setae. It differs from all the other species by the elytra being immaculate, and without distinguishable, even faint, longitudinal grooves.

Trigonoptera sulcata Auriv. var. *reversa* nov.

This variety differs conspicuously from the typical form in the premedian broad elytral spot being much broader laterally than towards the suture. The apex is also more broadly grey; this macula extending marginally a little and not restricted to the suture.

Length, 11.5 mms., breadth, 4 mms.

Waigeu; Lamlam. HOLOTYPE (♀) in the British Museum (Nat. Hist.), unique.



Fig. 7.

Trigonoptera sulcata Auriv., var. *reversa* nov. ♀ (× 5.8).

Trigonoptera albocollaris sp. nov.

Male: Only moderately robust; elongate.

Pitchy-black; the underside completely whitish pubescent except for a glabrous longitudinal band on about the median third from gula to abdominal apex. The legs finely greyish pubescent; the antennae very finely brownish pubescent, the segments from the fourth extremely narrowly annulated with white basally. The upperside glabrous and shining, except for distinct pubescent areas: the head with yellow pubescence medially, round the eyes and on each side of the anterior edge of the frons. The pronotum broadly white pubescent laterally, with an extremely sparsely pubescent median longitudinal band, which broadens posteriorly. The scutellum yellowish pubescent. The elytra with yellowish pubescent longitudinal maculae; the suture and margin narrowly yellowish, the marginal band uniting apically with the median discal band, which is almost complete from the base; a lateral discal band between these two, complete from the base to a little past the middle, then broken into an elongate posterior macula; between the median discal band and the suture is a more broken band of elongate spots reaching to about the apical third, which is somewhat bifurcate anteriorly.

The antennae slender, about one and a fifth times as long as the body; sparsely fringed beneath, but rather lengthily on the scape and third segment; the scape elongate, rather slender, slightly arcuate, subcylindrical; the third segment slightly sinuate, about one and a quarter times as long as the fourth segment, which is about equal in length to the scape; the rest gradually decreasing; all micropunctate. The antennal tubercles flat. The frons slightly trapeziform, about as broad as long, with a fine median longitudinal groove; with a distinct short anterior carina, which bifurcates medially, the two thus formed running to the vertex and each bifurcating again, the median pair uniting medially, the external pair running to the posterior border of each eye and becoming

obsolete. The whole head extremely finely and closely punctured; a few larger punctures on each side of the frons. The eyes very strongly emarginate; the lower lobes moderately strongly swollen, transverse, almost two and a half times as long as the genae. The pronotum about one and a third times as broad as long; convex; trilobed basally; bearing a very small lateral spine on each side, a little behind the middle; a little coarsely and rather sparsely punctured. The scutellum slightly transverse, broadly rounded, micropunctate. The elytra elongate, strongly attenuate to the apex, which is distinctly emarginate, both sutural and marginal angles being distinctly spinous, the marginal projecting more than the sutural; moderately closely granularly punctured basally, thence with five to eight very irregular rows of large punctures to a little past the middle, thence much more finely punctured and more sparsely to the apex.

The underside completely, rather sparsely, micropunctate medially, much more closely laterally, (where pubescent); the prosternal protuberance very broad, almost as high as the coxae, broadening and truncate apically and strongly projecting posteriorly; the mesosternal protuberance very broad, bilobed anteriorly; the apical ventrite about one and a quarter times as long as the preapical and truncate apically. The legs slender, of moderate length; the femora moderately claviform; all fairly closely micropunctured; the tarsi not very elongate.

Length, 11.5 mms., breadth. 3.75 mms.

Japen Island; Manai River. HOLOTYPE (δ) in the British Museum (Nat. Hist.). Unique.

This distinct new species is most closely allied to *T. lateplagiata* Breun, but differs conspicuously in not having a greenish tint; in the head being almost completely pubescent; in the pronotal lateral maculae being white, not ochraceous, and continued to the underside, and the elytral markings being more distinct.

Trigonoptera breuningiana sp. nov.

Male: Not very robust; elongate.

Black, shining; the legs and underside finely greyish pubescent, except for a median irregular, longitudinal glabrous band on the sternum and ventrites. The upperside glabrous except for distinct dense pubescence as follows: the head almost completely white pubescent except for a median frontal band, which diverges at the vertex and then trifurcates to the apex of the antennal tubercles and the posterior border of the head; the pronotum with a large pale yellowish or ochraceous lateral macula on each side, which narrows towards the anterior border, which it does not reach, and is strongly emarginate anteriorly; the scutellum sparsely whitish pubescent apically; the elytral suture and margin narrowly white;



Fig. 8.
Trigonoptera
albocollaris sp., nov.
 δ ($\times 5.8$).

on each elytral disc three distinct longitudinal white bands, which are distinctly broken just before the basal quarter, thus forming an oblique black band from beneath the humerus to the suture at the basal quarter; the innermost band sometimes uniting with the marginal at the apex; the lateral always complete and the median sometimes complete, or sometimes broken into two elongate spots; the antennae very finely brownish pubescent, sometimes a little greyish externally, the third to sixth or eighth segments narrowly and rather vaguely (particularly on the apical segments) annulate with grey basally.

The antennae slender, about one and a third as long as the body; rather distinctly fringed beneath on the basal five segments; the scape elongate, obconical, equal in length to the fourth segment; the third segment about one and a quarter times as long as the scape; the rest gradually decreasing; all micropunctate. The frons slightly trapeziform, very slightly broader than long, with a fine median longitudinal groove; with a rather obsolete bifurcating anterior carina; with a number of very large punctures between the base of the antennal tubercles, and a few on each side of the frons and on the vertex; the interstices micropunctate. The eyes almost subdivided; the lower lobes moderately swollen, distinctly transverse and about one and a half times as long as the genae. The pronotum about one and a third times as broad as long; convex; trilobed basally; bearing a very obtuse lateral spine on each side a little postmedially; the whole covered rather evenly with large moderately close punctures. The scutellum very slightly elongate, rounded apically; micropunctured. The elytra elongate, strongly attenuate to the apex, which is extremely slightly emarginate, almost truncate, with sutural and marginal angles very slightly spiniform; about the basal two-thirds covered irregularly with very



Fig. 9.
Trigonoptera
breuningiana sp.
nov. ♂ (× 7).

large, variably sparse, punctures, which stop rather abruptly towards the apical third, the interstices and apical third closely micropunctured.

The underside very finely and fairly closely punctured; the prosternal protuberance moderately broad, almost as high as the coxae, truncate apically and moderately posteriorly projecting; the mesosternal protuberance very broad, vertically truncate and very slightly bilobed anteriorly; the apical ventrite slightly longer than the preapical, and very slightly rounded apically. The legs slender, of normal length; the femora strongly clavate; all fairly closely micropunctured; the tarsi moderately elongate.

Length, 9—10 mms., breadth, 3.25—3.6 mms.

Dutch New Guinea; Mimika (4° 35' S. 136° 30' E) (Holotype), Modowi (Paratype). HOLOTYPE (♂) and PARATYPE (♂) in British Museum (Nat. Hist.).

This species is most closely allied to *T. lateplagiata* Breun., but differs conspicuously in the elytral bands being white, not yellow, and in them not being at all broken medially, as well as in minor structural details.

Trigonoptera neja sp. nov.

Female: Moderately robust, elongate.

Black, shining; the legs finely greyish pubescent; the underside glabrous medially, pubescent laterally (in this specimen this pubescence is matted and dirty blackish-brown, but will probably be found to be greyish in a fresh specimen); the antennae very finely brownish pubescent, somewhat intermixed with greyish on the basal segments. The eyes margined with dense whitish-yellow pubescence; the frons with a similarly coloured spot on each side anteriorly, and the broad groove of the vertex densely pubescent. The pronotum with only a few small inconspicuous sparse patches of greyish pubescence. The elytra almost completely greyish pubescent, except for the humeri, and an elongate postscutellar spot, a median elongate spot on each side of the suture, and three narrow glabrous longitudinal carinae on each elytron, which unite preapically in succession from suture to margin, the lateral carina extending to the apex; the elytra with large, sparsely scattered black punctures.

The antennae slender, reaching to about the apical sixth of the elytra; sparsely fringed beneath on the basal five segments; the scape elongate, subcylindrical, about equal in length to the third segment and about one and a third times as long as the fourth; the rest gradually decreasing; all micropunctured, those on the scape slightly larger. The frons very slightly trapeziform, distinctly transverse, with a fine median basal carina which bifurcates medially, (and is joined there by a much finer carina from each side of the labrum), each carina running to the vertex and becoming gradually obsolete posteriorly; a number of coarse punctures on each side of frons, the rest of the head very finely and closely punctured. The eyes almost subdivided; the lower lobes distinctly swollen, transverse and about twice as long as the genae. The pronotum one and a quarter times as broad as long; convex; moderately trilobed basally; with an obtuse lateral spine on each side a little behind the middle; the whole covered with numerous large punctures, the interstices closely micropunctured. The scutellum slightly elongate, glabrous, micropunctured. The elytra elongate, slightly rounded, but strongly attenuate to the apex, which is rather strongly emarginate, both sutural and marginal angles spinous, the latter the longest; the humeral region with a number of obtuse small tubercles; the whole with large, sparse, scattered punctures, somewhat



Fig. 10.
Trigonoptera neja
sp. nov. ♀ (× 4.4).

subseriately arranged, the interstices closely micropunctured.

The underside finely micropunctured; the prosternal protuberance very broad, truncate posteriorly, and strongly posteriorly projecting; the mesosternal protuberance extremely broad, and strongly bilobed anteriorly; the apical ventrite almost twice as long as the preapical, with an obtuse median longitudinal groove, and broadly truncate apically. The legs slender, not very elongate; the femora moderately clavate; all finely micropunctured; the tarsi rather slender and moderately elongate.

Length, 15 mms., breadth, 4.8 mms.

Koberi, 8,000 ft. (I have been unable to find this locality). HOLOTYPE (♀) in the British Museum (Nat. Hist.). Unique.

This species is rather distinct from any other in the genus, but is perhaps most closely allied to *T. maculata* Perroud or *T. vittata* Gestro, but differs conspicuously from both, in lacking pronotal markings, and in the elytra being almost wholly greyish pubescence.

Key to the Genus *Trigonoptera* Pascoe

1. Elytra more or less dark unicolorous, without any light coloured spots or markings *immaculata* sp. nov.
- Elytra with light coloured spots or lines, (perhaps indistinct) 2
2. Elytra with extremely vague, indistinct pale longitudinal bands, particularly in the apical half; head and prothorax with long distinct erect setae, and the elytra to a less extent *obscura* Gilmour 1949.
- Elytral pale markings at least distinct, though perhaps ill-defined; no numerous distinct long setae 3
3. Elytra marked with red spots *ornata* McLeay 1886.
- Elytral spots not red 4
4. Elytra with a complete white transverse premedian fairly regular band 5
- Elytra without a complete transverse band 7
5. Scutellum covered with pale yellow pubescence *flavoscutellata* Breun. 1939.
- Scutellum covered with brown pubescence 6
6. Elytral markings clearly whitish, irregular, those in the apical half tending to ramify; lacking a marginal band, except apically; the sutural band not joining the transverse premedian band *pseudomaculata* Breun. 1939.
- Elytral markings clearly yellow, fairly regular, those in the apical half not ramifying; a more or less complete marginal band present; the sutural band uniting with the premedian transverse band *transversefasciata* Gilmour 1949.
7. Each elytron with a large transverse premedian white spot 8
- Elytra without this spot 13
8. This spot extremely broad near the suture *sulcata* Auriv. s.str. 1924.
- This spot not broadened suturally 9

9. This spot extremely broad marginally
 *sulcata* Auriv. ab. *reversa* nov.
- This spot neither broadened suturally or marginally, and fairly regular 10
10. At the basal quarter and apical third of each elytron is a curved clear white line 11
- Elytra without similar lines, only marked with vague longitudinal whitish bands 12
11. A number of small spots at the base of the elytra; the longitudinal whitish line, in the apical third, not reaching the lateral border *spilonota* Gestro, s.str. 1876.
- Without a number of white small spots at the base of the elytra, only a short curved longitudinal line; the longitudinal white line in the apical third reaching the lateral border
 *spilonota* Gestro, var. *albonotata* Gah. 1915.
12. On each side of the pronotum a broad longitudinal clear white band *leptura* Gestro 1876.
13. Pronotum covered with uniform ochraceous pubescence ... 14
- Pronotum not uniformly pubescent 15
14. The sutural ochraceous longitudinal bands complete
 *flavicollis* Breun. 1940.
- The sutural band reduced to the apical quarter; the second and third reduced to small elongate spots
 *flavicollis* Breun. ab. *stictica* Breun. 1940.
15. Elytra marked with clear round spots, without bands 16
- Elytra marked with longitudinal bands 21
16. Pronotum covered with small round spots, without bands
 *guttulata* Gestro 1876.
- Pronotum marked with a longitudinal light band on each side 17
17. Pronotum without clear discal spots 18
- Pronotum with clear discal spots 19
18. Head without any ochraceous spots, except two at the anterior border of the frons; with two pronotal bands; underside with no lateral longitudinal ochraceous band
 *japeni* Gilmour 1949.
- Head with seven ochraceous spots; four pronotal bands; underside with a lateral ochraceous band ... *gracilis* Auriv. 1917.
19. Elytral spots yellow and small *olivacea* Auriv. 1908.
- Elytral spots white, larger 20
20. Elytral punctures obsolete in the apical half
 *woodfordi* Gah. 1888.
- Elytra distinctly punctured to the apex ... *tessellata* Pasc. 1867.
21. On each side of the pronotum a large oval spot, sometimes broadened and almost bandlike basally 22
- Pronotum without this spot 24
22. Pronotal maculae pure white *albocollaris* sp. nov.
- Pronotal maculae yellow or ochraceous 23
23. Elytral longitudinal bands yellow, somewhat ill-defined and distinctly, fairly broadly broken medially at least, and sometimes basally *lateplagiata* Breun. 1940.

- Elytral longitudinal bands pure white; clearly defined and regular; complete on the whole, only transversely broken basally *breuningiana* sp. nov.
- 24. Elytral punctures surrounded with a very small black circle, (at least on about the basal half), which interrupt the clear markings *marmorata* Auriv. 1908.
- Elytral punctures not encircled with black 25
- 25. Pronotum with a broad longitudinal denuded median band, extending to the base 26
- Pronotum without a median band, or if one present, then not quite reaching the base 28
- 26. Pronotum without either light coloured spots or bands; almost completely dark, with only a few, very indistinct light hairs ...
..... *neja* sp. nov.
- Pronotum with distinct light coloured markings 27
- 27. Pronotum marked with round discal spots
..... *maculata* Perroud 1855.
- Pronotum marked with bands *vittata* Gestro 1876.
- 28. Ferrugineous (with ochraceous markings)
..... *flavipicta* Pasc. 1867.
- Black or pitchy 29
- 29. Elytra obliquely truncate apically (the marginal angle spined) 30
- Elytra not obliquely truncate apically (the marginal angle also spined) 32
- 30. Pubescence above greyish-white; elytral bands strongly broadened premedially and forming transverse triangular spots; lower lobes of the eyes twice as long as the genae; without distinct punctures in the apical quarter of the elytra
..... *trobriandensis* Breun. 1948.
- Pubescence ochraceous or yellow; elytral bands narrow, not broadened; lower lobes of the eyes not more than one and a half times as long as the genae; with distinct punctures in the apical quarter of the elytra 31
- 31. Elytra densely and very coarsely punctured; some of the elytral punctures with a very small dark brown circle
..... *sumbawana* Breun. 1948.
- Elytra finely and less closely punctured; no punctures with brown circles *nervosa* Pasc. 1867.
- 32. Elytra with an irregularly rounded spot at the basal third, which is the breadth of the two sutural bands
..... *isabellae* Gilmour 1949.
- Elytra without a similar spot 33
- 33. Elytral bands irregularly broken; pronotal median bands broken, or lacking; the lower lobes of the eyes one and a half times as long as the genae *sordida* Pasc. 1867.
- Elytral bands fairly regular; the pronotal bands complete; the lower lobes of the eyes twice as long as the genae
..... *margaretæ* Gilmour 1949.

Tmesisternus (Arrhenotus) breuningi sp. nov.

Black, glabrous and shining, except for pale yellow pubescent markings as follows: — the frons laterally and medially, and surrounding the eyes; a narrow band on each side of the vertex. The pronotal disc with two narrow rather sinuate longitudinal bands on each side, each pair uniting anteriorly and posteriorly. The scutellum with a small oval macula on each side. Each elytron marked with five, irregularly broken, longitudinal rows of very small yellowish spots: — a sutural, a lateral and three on the disc, these placed in the grooves between the almost obsolete and very obtuse longitudinal carinae; these spots tend to form themselves into transverse series, most distinctly in the apical half, where the spots are a little larger. The underside covered with pale yellow pubescence laterally, glabrous medially. The antennae dark brown, covered with very fine brownish pubescence. The femora and tibiae green, the base of the femora and the tarsi light ferrugineous; shining, almost glabrous, covered with very fine sparse pale yellowish pubescence.

Male: Only moderately robust; very elongate.

The antennae about as long as the body; rather sparsely fringed beneath; the scape about equal in length to the third segment; the fourth segment about one and a quarter times as long as the third; all segments micropunctured. The frons very finely and fairly closely punctured with a few very sparse large punctures here and there. The vertex very finely and fairly closely punctured. The lower lobes of the eyes rather strongly swollen, transverse, about twice as long as the genae. The pronotum about twice as broad as long; strongly broadened horizontally anteriorly, the antero-latero-superior tubercle continued in a lateral carina; the infero-medio-lateral tubercle very squat and obtuse; the disc with four obtuse longitudinal pubescent grooves, which are very coarsely punctured along with the lateral glabrous border; smooth and almost impunctate medially, with only a few large scattered punctures. The scutellum transverse, broadly rounded apically; the median glabrous band not very closely micropunctured; closely micropunctured laterally, where pubescent. The elytra very elongate, very gradually and slightly rounded to the apices, which are rather strongly emarginate, both sutural and marginal angles being shortly spined; each disc with very faint traces of two almost obsolete longitudinal carinae; irregularly covered with large scattered punctures, sparsely basally, becoming much more close to the middle, thence becoming finer and more sparse to the apex; the interstices very finely micropunctured.

The underside very closely and finely punctured laterally; not very closely, and very finely micropunctured medially; the apical ventrite very slightly longer than the preapical and broadly truncate



Fig. 11.
Tmesisternus
(*Arrhenotus*)
breuningi sp.
nov. ♂ (× 6).

apically. The femora very strongly clavate; the legs only moderately closely micropunctured.

Female: Similarly coloured to the male. A little more robust than the male. The antennae somewhat shorter. The pronotum not broadest anteriorly, and much more convex. The elytral apices slightly obliquely emarginate. The apical ventrite about one and a half times as long as the preapical; slightly emarginate apically and with a distinct fine median longitudinal groove.

Length, 11—13 mms., breadth, 3.2—4 mms.

Waigeu (3,000 ft. C. J. J.) HOLOTYPE (δ) and ALLOTYPE (φ) in the British Museum (Nat. Hist.).

This distinct new species is most closely allied to *T. (A.) serie-maculatus* Breun. but differs conspicuously in the elytral yellow maculae being much smaller and arranged in five longitudinal series, not three.

Tmesisternus (s.str.) *cinnamomeus* sp. nov.

Male: Elongate, robust.

Pitch-black. Covered almost completely and more or less uniformly above and below with rather dark yellowish-orange pubescence, except for narrow black glabrous lines as follows: on the middle of the frons and vertex; one on each side of the frons extending to the apex of the antennal tubercles; two from the posterior border of the lower lobes of the eyes, one lateral and one discal; a narrow median longitudinal one on the pronotum, and a very narrow median one on the scutellum. The elytral pubescence very vaguely lighter in parts. The underside glabrous and shining medially from the submentum to about the middle of the epical ventrite.

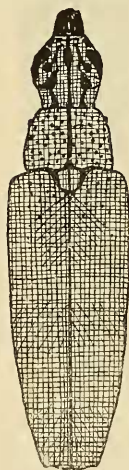


Fig. 12.
Tmesisternus
(s. str.) *cinnamomeus* sp.
nov. δ ($\times 3.5$).

The antennae slender, almost reaching the elytral apex; fringed beneath, becoming sparser towards the apical segment; all micropunctate. The frons with a strong median grooved carinae; a strong lateral one on each side extending to the antennal tubercle and shortly branching postero-medially; the whole head finely and fairly closely punctured. The lower lobes of the eyes strongly transverse, nearly twice as long as the genae. The pronotum transverse distinctly narrowed anteriorly; the antero-latero-superior tubercle isolated; the medio-infero-lateral moderately large and distinct; the disc sparsely covered with large irregular punctures, the interstices very finely and closely punctured. The scutellum about as broad as long, very broadly rounded apically; closely micropunctured. The elytra very elongate, slightly rounded to the apices, which are rather broadly, moderately bisinuate, the sutural angle obtuse, the marginal angle very slightly produced; with vague traces of two or three almost obsolete longitudinal carinae close to the suture; covered, rather irregularly, with not

very close, large punctures, which gradually become finer towards the apex; the interstices closely micropunctured.

The underside with about the median quarter glabrous, shining and with a number of rather sparse micropunctures; laterally with sparse scattered large conspicuous punctures, the interstices densely micropunctured. The apical ventrite about one and a half times as long as the preapical and truncate apically. The legs moderately elongate; very finely and fairly closely punctured.

Length, 18.5 mms., breadth, 5.2 mms.

Ceram, Mansueta. HOLOTYPE (δ) in the British Museum (Nat. Hist.). Unique.

This distinct new species is probably most closely allied to *T. (s.str.) demissus* Breun., but differs conspicuously in its almost uniform pubescence and the apical marginal elytral angle not being triangularly produced.

Tmesisternus (s.str.) **teragramus** sp. nov.

Female: Elongate, robust.

Pitchy-brown. Covered with pale brownish pubescence and closely marbled above and below with greenish grey pubescence, except for glabrous narrow carinae as follows: — a median one on the frons and vertex, joined on each side by one from the antennal tubercles which runs anteriorly onto the frons and then backwards; a median pronotal band, extended broadly onto the scutellum. On each elytron a pale brownish lateral antero-medially triangular macula, immediately behind the middle. The underside glabrous and shining medially.

The antennae slender, (unfortunately both broken after the third segment); second and third segments fringed beneath, and micropunctured. The frons and vertex with a number of very large scattered punctures medially; the interstices very finely and closely punctured. The lower lobes of the eyes large, transverse, about twice as long as the genae. The pronotum transverse, rounded laterally and distinctly narrowing anteriorly; the antero-supero-lateral tubercle almost obsolete, isolated; the medio-infero-lateral tubercle small but distinct; the disc covered (except medially) fairly sparsely with very large punctures; the interstices finely and closely punctured. The scutellum very slightly transverse; broadly rounded apically; finely and closely punctured. The elytra very elongate, almost parallel-sided for their basal two-thirds, thence rounded to the apices, which are distinctly, but not very strongly, emarginate, the sutural angle distinct, the marginal slightly spinous; each disc with two almost obsolete longitudinal carinae, which unite preapically; covered basally with large, mo-

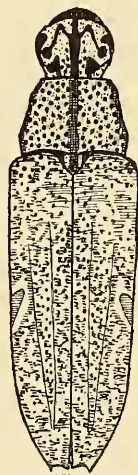


Fig. 13.

Tmesisternus (s.
str.) **teragramus**
sp. nov. ♀ (× 4.3).

derately close punctures, which become much finer towards the apex; the interstices closely micropunctured.

The underside glabrous and sparsely micropunctured medially; laterally with a number of sparse moderately large punctures, the interstices very finely and closely punctured. The apical ventrite almost twice as long as the preapical, slightly emarginate apically and with a fine median longitudinal groove. The legs fairly robust; very finely and fairly closely punctured.

Length, 15.5 mms., breadth, 4.7 mms.

Ar. HOLOTYPE (♀) in the British Museum (Nat. Hist.). Unique.

This new species is most closely allied to *T. (s.str.) griseus* Thoms., from which it is immediately distinguishable in lacking a transverse median dark band reaching to the suture.

Key to the Genus *Tmesisternus* Latr.

- A. Latero-superior tubercle of the pronotum isolated, not continued in an almost complete lateral carina subgenus *Tmesisternus* s. str.
- B. This tubercle continued in a more or less complete lateral carina, which extends as far as, or nearly, the base of the pronotum subgenus *Arrhenotus* Pascoe.

Subgenus *Tmesisternus* Latr. s.str.

- 1. Elytra unicolourous cinnamon-brown pubescent; head, pronotum and underside (laterally) almost wholly similarly coloured *cinnamoneus* sp. nov.
- Elytra with at least moderately distinct markings, either discally, or along the margin, or both 2
- 2. Apical half of the elytra clear red, marked with some small dark spots, contrasting strongly with their anterior half 3
- Apical half of elytra never clear red 4
- 3. Extreme elytral base clear red *jobiensis* Gestro 1876.
- Basal half of elytra violet or dark blue ... *speciosus* Pasc. 1867.
- 4. Elytra completely green, without grooves, only marked with some very small white spots *viridipennis* Breun. 1940.
- Elytra never completely green 5
- 5. Each elytron marked with a broad longitudinal greyish-white discal band along almost its whole length 6
- Elytra without a similar band 7
- 6. Pronotum sparsely punctured; elytral band regular, not approaching the suture *phaleratus* Thoms. 1865.
- Pronotum densely and finely punctured; elytral band broken on the posterior half into several spots, of which one almost reaches the suture *griseovittatus* Breun. 1939.
- 7. Elytra marked with a very broad transverse, regular, straight, reddish-brown or yellowish band, a little before the middle ...
..... *latefascia* Heller 1914.
- Elytra without a similar band 8
- 8. Elytra marked with a transverse yellow band, which covers all

- their surface except the basal and apical parts *modestus* Gah. 1915.
- Elytra without a similar band 9
9. On each elytron a broad yellowish or whitish band, which extends from the middle of the base to the lateral border behind the humerus; no other distinct markings *humeralis* Auriv. 1923.
- Elytra without a similar band 10
10. Elytra marked with a broad transverse, black, postbasal band (or at least a quadrangular spot) 11
- Elytra without these designs 12
11. This band reaches the lateral border; the apical quarter of the elytra without ochraceous spots *transversefasciatus* Breun. 1939.
- This band does not reach the lateral border; the apical quarter of the elytra marked with ochraceous spots *nigrofasciatus* Auriv. 1908.
12. On each elytron a large, lateral premedian round black spot, and a small similar one at the internal border of the humeral callus *quadrinaculatus* Auriv. 1908.
- Elytra without these spots 13
13. Each elytron marked with quadrangular spots, formed by clear green scales with a strong metallic lustre, arranged in three longitudinal series *fulgens* Breun. 1939.
- Elytra without similar spots 14
14. On each elytron a large lateral, posthumeral, premedian, whitish spot (rounded or triangular) on a dark ground colour 15
- Elytra without this spot 26
15. Elytra with numerous deep longitudinal grooves 16
- Elytra without similar grooves 18
16. The clear posthumeral spot closely approaching the suture; (the apical marginal angle pointed) *sulcatus* Auriv. 1910.
- This spot only reaching the middle of the disc 17
17. The apical marginal angle rounded *pseudosulcatus* Schwarz. 1924.
- This angle spinous *japeni* Gilmour 1949.
18. On each elytron a round pale yellow spot at the middle of the base *lepidus* Pasc. 1867.
- Elytra without this spot 19
19. On each elytron a clear premedian spot at the suture 20
- Elytra without this spot 21
20. The apical sutural angle exceeding the marginal; pronotum with a lateral brown band *lotor* Pasc. 1859.
- The apical marginal angle exceeding the sutural; no lateral brown band on the pronotum *opalescens* Pasc. 1867.
21. On each elytron a large light spot, which extends from the middle of the base obliquely behind as far as the suture *mortyanus* Thoms. 1865.
- Elytra without a similar spot 22
22. Elytra without a clear spot at the base 23

- Elytra with a clear spot at the base 25
- 23. The apical marginal elytral angle scarcely marked
..... *elongatus* Breun. 1945.
- This angle spinous 24
- 24. Elytra finely punctured ... *externamaculatus* Breun. & De Jong
..... 1941. (= *rufofemoratus* Breun. 1946).
- Elytra coarsely punctured ... *gebehensis* Breun. & De Jong 1941.
- 25. The transverse postmedian band reaching the suture; the
posthumeral spot is rounded *wiedenfeldti* Auriv. 1910.
- The transverse postmedian band not reaching the suture; the
posthumeral spot triangular *affinis* Breun. 1939.
- 26. On each elytron two rather large lateral dark brown spots nar-
rowly ringed with yellow *bifuscomaculatus* Breun. 1939.
- Elytra without similar spots 27
- 27. On each elytron two short, narrow, distinct, ochraceous bands
on dark brown, (one posthumeral, which descends obliquely
from the lateral border to the disc; one postmedian which rises
obliquely from the lateral border to the disc)
..... *dissimilis* Pasc. 1867.
- Elytra without these bands 28
- 28. On the elytra a distinct triangular black spot in common with
the suture on a clear ground colour 29
- Elytra without this spot 30
- 29. This spot touches the scutellum by its anterior point
..... *distinctus* Boisd. 1835.
- This spot placed at the middle of the elytra
..... *nigrotriangularis* Hell. 1914.
- 30. On each elytron two or three very narrow yellowish or whitish
transverse lines or bands, distinct on a dark ground; the sur-
face without a metallic lustre 31
- Elytra without similar bands, or the surface with a metallic
lustre 37
- 31. The premedian elytral band forms a large M. on both elytra
together 32
- The premedian band straight or slightly curved 33
- 32. On each side of the frons is a large distinct ochraceous spot
..... *bruijini* Gestro 1876.
- Frons without such a spot *pulvereus* Pasc. 1867.
- 33. Legs ferrugineous 34
- Legs and antennae dark like the rest of the surface 35
- 34. Anterior elytral band reaching the suture, not very oblique ...
..... *tersus* Pasc. 1862.
- Anterior elytral band not reaching the suture, extremely
posteriorly oblique from disc to margin
..... *cyclopsi* Gilmour 1949.
- 35. Apical marginal angle not lobed *trivittatus* Guér. 1835.
- This angle ending in a pointed lobe 36
- 36. Pronotal and elytral punctures surrounded with a small brown
circle *flavovittatus* Breun. & De Jong 1941.
- These punctures not surrounded with a brown circle

- *oblongus* Boisd. 1835.
37. On each elytron a rather broad premedian white transverse band, without any other white designs *vinculatus* Heller 1914.
- Elytra without a similar band, or with other markings present as well 38
38. Elytra marked with two to four, more or less broad, whitish or yellowish bands, of which one is premedian and one post-median (very rarely the premedian is atrophied) ; legs never ferrugineous 39
- Elytra marked otherwise, or the legs ferrugineous 41
39. Apical marginal elytral angle rounded *bifasciatus* Breun. 1939.
- This angle never prominent 40
40. These bands interrupted by numerous small spots of the ground colour, thus forming a network of light colour *politus* Blanch. 1853.
- These bands compact, or formed of elongate spots placed one at the side of the other *schaumi* Pasc. 1867.
41. Pronotum and elytra marked with narrow curved white bands ; the fourth antennal segment white, except the apex *excellens* Auriv. 1908.
- Elytra without these markings ; the fourth antennal segment not white 42
42. Pronotal disc with five longitudinal brown bands 43
- Pronotal disc with only three similar bands at the most ... 48
43. Lateral pronotal spine scarcely marked ... *inermis* Breun. 1939.
- Lateral pronotal spine very distinct 44
44. Apical marginal elytral angle rounded 45
- Apical marginal elytral angle pointed 47
45. Elytra reddish-brown pubescent, with four irregular brownish-yellow transverse bands *strandi* Breun. 1939.
- Elytra dark brown or black, glabrous except for pale yellowish or golden spots, not forming four transverse bands 46
46. Pubescence pale yellowish-brown ; elytral maculae not very elongate, distinctly broken and almost no discal spots in the basal median two-thirds ; circa 10 mms *humboldti* Gilmour 1949.
- Pubescence of golden scales ; elytral maculae elongate, four in basal half, five in apical half ; circa 20 mms *aeneofasciatus* Breun. 1948.
47. Femora reddish-yellow *continentalis* Breun. 1945.
- Femora dark brown *monticola* Gestro 1876.
48. Elytra marked with a rather broad, transverse, postmedian white band *albovittatus* Breun. 1939.
- Elytra without this band 49
49. On each elytron a narrow whitish band, which begins on the disc at the basal quarter and extends obliquely behind to the middle of the lateral border *obliquefasciatus* Breun. 1939.
- Elytra without a similar band 50

50. Femora light red, covered with very fine yellowish pubescence 51
- Femora brown or black, or rarely reddish, but then covered with dense pubescence 54
51. Lateral pronotal spine scarcely marked ... *pullus* Breun. 1945.
- This spine very distinct 52
52. Elytra without a transverse preapical greyish or yellowish band *dubius* Montrz. 1855.
- Elytra marked with such a band 53
53. Apical elytral marginal angle scarcely marked *petechialis* Pasc. 1867.
- This angle ending in a triangular lobe *torridus* Pasc. 1867.
54. On each elytron a yellowish line which extends from the middle of the base obliquely to the suture, which it reaches a little before the middle 55
- Elytra without this line 57
55. Femora and scape brown ... *pseudohieroglyphicus* Breun. 1939.
- Femora and scape greenish 56
56. The narrow yellow marking distinct, M-shaped, and reaching the suture; the premedian elytral brown macula triangularly pointed apically *hieroglyphicus* Blanch. 1853.
- The narrow yellow markings indistinct, not M-shaped, or reaching the suture; the premedian elytral brown macula not triangularly pointed apically *aubrooki* Gilmour 1949.
57. On each elytron a small, postmedian, lateral, clear yellowish spot on a dark brown ground 58
- Elytra without this spot 59
58. This spot reaching the lateral border ... *herbaceus* Pasc. 1862.
- This spot not reaching the lateral border *postfasciatus* Breun. & De Jong 1941.
59. Elytra covered, in part, with metallic scales 60
- Elytra without metallic scales 64
60. On each elytron a large lateral posthumeral metallic spot ... 61
- Elytra without this spot, marked rather with bands 62
61. Apical elytral marginal angle ending in a pointed spine *quadriplagiatus* Breun. 1939.
- This angle not spined *cupreosignatus* Auriv. 1907.
62. Elytra marked with narrow longitudinal blue bands; their apical part covered with golden scales *gabrielae* Schwarz. 1931.
- Elytra otherwise marked 65
63. On each elytron a broad transverse premedian denuded band ... *dohertyi* Jordan 1894.
- Elytra without a similar band 64
64. Elytral apices rounded; elytra with greenish-gold metallic scales *isabellae* Vollenh. 1871.
- Elytral apices emarginate; elytra with white metallic scales ... *aeneovittatus* Breun. 1948.
65. At the lateral border of each elytron a longitudinal dark brown

- band, or some similarly coloured distinct spots 66
- Elytra without a similar lateral band or spots 84
66. This band bordered on the inner side by a longitudinal rosy band on the anterior half *marginalis* Breun. 1939.
- This band not bordered by a rosy band 67
67. Elytra obliquely truncate apically; the marginal angle not spined 68
- Elytra emarginate apically; the marginal angle spined 70
68. Elytra marked with some oblique brown bands, which rise to the suture (interrupted by some longitudinal yellow lines) *obsoletus* Blanch. 1853.
- Elytra without similar bands 69
69. On each elytron a curved longitudinal band underneath the humerus *fuscognatus* Breun. 1945.
- Elytra without a similar band *avarus* Pasc. 1867.
70. Elytra marked with a rather large glabrous smooth and shining postscutellar spot 71
- Elytra without such a spot 73
71. Elytra without discal dark brown bands *agriloides* Pasc. 1867.
- Elytra marked with such bands, which reach the suture ... 72
72. The median dark brown elytral band in a zigzag *pseudointricatus* Breun. 1939.
- The median dark brown elytral band in a slight arc, (with the concavity towards the apex) ... *pseudotessellatus* Breun. 1939.
73. The lateral brown pronotal band completely covering the lateral spine 74
- This band passes on the inner side of the lateral spine, by the latero-superior tubercle 80
74. Elytral disc covered with reddish-brown to yellowish-brown uniform pubescence 75
- Elytral disc marked with a dark brown design on a lighter base 76
75. At the lateral border of the elytra a longitudinal dark brown band *laterivittata* Breun. 1939.
- At the lateral border of the elytra two dark brown spots (one before and one after the middle) *elateroides* Gestro 1876.
76. Elytra marked with a dark brown postmedian transverse band *tessellatus* Boisd. 1835.
- Elytra without a similar band 77
77. Pronotum without a median longitudinal brown band 78
- Pronotum with such a band 79
78. Elytra with four longitudinal yellow lines, and yellow spots in the apical third *lineatus* M'Leay 1886.
- Elytra without such yellow lines and spots *laterimaculatus* Gilmour 1949.
79. The lateral dark brown elytral band interrupted by three yellow spots (a premedian, a postmedian and a preapical) *pleurosticticus* Pasc. 1867.
- This band interrupted by a single median yellow spot

- *lateralis* M'Leay 1886.
80. Elytra without a transverse brown band in the posterior half 81
- Elytra marked with such a band 82
81. All the basal quarter of the elytra finely pubescent, and thus darker than the rest *transversatus* Breun. 1939.
- In the basal quarter of the elytra, only the lateral border, and a postscutellar spot covered with a finer pubescence and thus appearing darker *densepunctatus* Breun. 1939.
82. On the lateral parts of the pronotum a broad longitudinal dark brown band 83
- Pronotum without a similar band
..... *pseudomonticola* Breun. 1939.
83. Apical marginal elytral spine long *intricatus* Pasc. 1867.
- This spine short *ornatus* Breun. 1939.
84. Elytra completely marbled with reddish-brown, or greyish pubescence, except for a median transverse brown band, or a lateral transverse brown spot 85
- Elytra marked with designs, or without a similar band or spot 88
85. The brown elytral marking a spot, not passing the middle of the disc towards the suture 86
- This band reaching the suture 87
86. Elytra marbled with light reddish-brown
..... *lugubris* Breun. 1939.
- Elytra marbled with greyish *teragramus* sp. nov.
87. This band is narrow; all the pubescence greyish
..... *griseus* Thoms. 1865.
- This band is broad; the pubescence reddish-brown
..... *divisus* Auriv. 1927.
88. Elytra with some raised carinae or discal grooves 89
- Elytra without such raised carinae or grooves 99
89. On each elytron a very distinct ovular ochreous-yellow spot at the side of the scutellum *bifoveatus* Auriv. 1926.
- Elytra without this spot 90
90. Apical elytral marginal angle rounded 91
- This angle not rounded 93
91. Elytra marked with a transverse denuded band
..... *helleri* Schwarz. 1926.
- Elytra without this band 92
92. Elytra with a narrow postscutellar glabrous spot
..... *costulatus* Breun. 1939.
- Elytra without this spot *strigosus* Pasc. 1867.
93. Apical marginal angle spinous *costipennis* Breun. 1940.
- Apical marginal angle ending in a spine 94
94. Pronotal disc very finely punctured 95
- Pronotal disc rather coarsely punctured 96
95. Elytra with a broad straight, denuded, transverse band a little after the middle *flavolineatus* Breun. 1939.
- Elytra without a similar band *virescens* Breun. 1939.

96. Femora and first three antennal segments clear green
 *viridis* Gestro 1876.
 — Femora and first three antennal segments dark brown 97
97. On each elytron an elongate whitish-yellow spot at each side
 of the scutellum *schraderi* Kriesche 1926.
 — Elytra without a similar spot 98
98. The postscutellar elytral spot green ... *arfakianus* Gestro 1876.
 — This spot reddish *papuanus* Breun. 1945.
99. Apical-marginal elytral angle ending in a spine 100
 — This angle not ending in a spine 105
100. Femora green, almost without pubescence
 *marmoratus* Guér. 1835.
 — Femora brown, covered with dense yellowish or greyish pu-
 bescence 101
101. Head and pronotum marked with metallic gold pubescence ...
 *metalliceps* Breun. 1940.
 — These parts without this metallic pubescence 102
102. The postscutellar impunctate spot is covered with pubes-
 cence *vagefasciatus* Breun. 1939.
 — This spot without pubescence 103
103. This spot elongate *bolanicus* Breun. 1939.
 — This spot transverse 104
104. Apical elytral marginal spine very short
 *transversus* Pasc. 1867.
 — This spine rather long *unipunctatus* Guer. 1835.
105. Each elytron marked with a curved transverse postmedian
 band and another preapical zigzag one, of an ochreous
 colour *luteostriatus* Heller 1912.
 — Elytra without these bands 106
106. Apical marginal elytral angle triangularly prominent
 *demissus* Breun. 1939.
 — This angle rounded 107
107. Pronotum covered with ochraceous pubescence and marked
 with three denuded black longitudinal bands
 *elegans* Heller 1914.
 — Pronotum without similar bands 108
108. Tibiae clear red, contrasting strongly with the femora
 *glaucus* Pasc. 1867.
 — Tibiae greenish, the same as the femora
 *conicicollis* Thoms. 1864.

Subgenus *Arrhenotus* Pascoe

1. Elytra unicolorous, reddish, bearing some broad, smooth longi-
 tudinal carinae *costatus* Breun. 1939.
 — Elytra not unicolorous, without similar carinae 2
2. Elytra dark brown, marked with large elongate clear spots ... 3
 — Elytra without these spots 4

3. Apical marginal elytral angle spinous ... *imitans* Breun. 1939.
- This angle rounded *ochraceosignatus* Breun. 1939.
4. Almost completely covered with bluish-green metallic scales ...
..... *rafaelae* Lansb. 1885.
- Surface without metallic scales 5
5. A longitudinal brown denuded band on each side of the pro-
notal disc 6
- Pronotum without a similar band 14
6. Femora dark brown 7
- Femora reddish, covered with fine yellow pubescence 11
7. Femora covered with dense yellowish-brown pubescence ; elytra
without golden spots 8
- Femora covered with fine yellow pubescence ; elytra marked
with spots formed of golden scales 9
8. Apical sutural elytral angle pointed ; the marginal prominent ;
pale ochraceous-yellow pubescent, elytra brokenly maculate ...
..... *venatus* Thoms. 1864.
- Apical sutural elytral angle prolonged ; the marginal pointed ;
yellowish-brown pubescent, the elytra with vague, transverse
brown bands *lansbergei* Breun. 1945.
9. Elytra marked with transverse, more or less complete bands,
and elongate spots *salomonum* Auriv. 1920.
- Elytra with separate rounded spots, more or less arranged in
longitudinal series 10
10. Elytral spots large, in three series *seriemaculatus* Breun. 1939.
- Elytral spots small, in five series *breuningi* sp. nov.
11. On each elytron a large lateral median round yellow spot
..... *prasinatus* Heller 1914.
- Elytra without this spot 12
12. On each elytron a longitudinal dark brown band at the lateral
border *soembanus* Schwarz. 1931.
- Elytra without this band 13
13. The apical sutural elytral angle spinous ; elytral spots in six
longitudinal series *rufipes* Blanch. 1853.
- This angle ending in a pointed spine ; elytral spots in three
longitudinal series *wallacei* Pasc. 1855.
14. Completely covered with pale yellow pubescence, this pubes-
cence denser in places on the elytra in the grooves
..... *flavescens* Breun. 1940.
- Otherwise marked 15
15. Elytra covered with brown pubescence and each marked with
some longitudinal yellow bands *heurni* Schwarz. 1924.
- Otherwise pubescent 16
16. Pronotum covered with yellowish-brown pubescence and mark-
ed on each side with a narrow longitudinal black band, which
passes by the lateral spine *timorlautensis* Breun. 1939.
- Pronotum not marked thus 17
17. On each elytron a large round lateral posthumeral distinct light
spot 18

- Elytra without a similar spot 20
- 18. Elytra bearing numerous longitudinal grooves
 *ludificator* Heller 1914. 19
- Elytra without conspicuous grooves 19
- 19. Elytra with two narrow oblique ochraceous bands, one median
 and one postmedian; without a spot at the marginal apical
 third, or a crescentic median sutural spot
 *bilineatus* Auriv. 1927.
- Elytra without narrow ochraceous bands; with an oblique
 marginal spot at the apical third and a crescentic median sutural
 spot *quadripunctatus* Gilmour 1949.
- 20. Elytra bearing some deep longitudinal grooves 21
- Elytra without these grooves, except perhaps a few close to
 the suture 24
- 21. Apical marginal angle rounded 22
- Apical marginal angle distinct 23
- 22. Elytral grooves extending to the lateral border; elytral pubes-
 cence pale yellow, not condensed into transverse bands
 *margaretæ* Gilmour 1949.
- No elytral grooves in the lateral third; elytral pubescence light
 reddish brown, and condensed into transverse bands
 *rotundipennis* Breun. 1948.
- 23. Humeri prominent; the elytral preapical transverse band
 vague *irregularis* Gestro 1876.
- Humeri not prominent; the preapical band distinct
 *pseudoirregularis* Breun. 1939.
- 24. Each elytron with a distinct yellow line (on dark ground),
 which descends obliquely from the humerus to the suture and
 returns to the lateral border 25
- Elytra without a similar line 26
- 25. This line reaches the lateral border at the beginning of the
 apical quarter *biarcifer* Blanch. 1853.
- This line reaches the lateral border before the beginning of the
 apical third *andreas* Kriesche 1926.
- 26. Elytra marbled with yellow, except on a broad transverse
 median brown band which rises obliquely towards the suture;
 the longitudinal lateral carina of the pronotum not very
 pronounced *agrarius* Pasc. 1867.
- Elytra otherwise marked; the lateral carina more promi-
 nent 27
- 27. Apical marginal elytral angle ending in a rather long pointed
 spine 28
- This angle not ending in a spine 33
- 28. Lateral pronotal spine slender and pointed
 *subchlorus* Heller 1914.
- This spine longer and conical 29
- 29. Elytra marked with distinct ochraceous spots
 *ochreomaculatus* Breun. 1945.
- Elytra without similar spots 30
- 30. Each elytron with two longitudinal discal carinae

- *albertisi* Breun. 1939.
- Elytra without similar carinae 31
31. Elytra without a postscutellar smooth spot
 *canofasciatus* Auriv. 1927.
- Elytra bearing a postscutellar smooth spot 32
32. Apical marginal elytral spine is long ... *froggatti* M'Leay 1886.
- This spine is short *brevespinosus* Breun. & De Jong 1941.
33. Pronotum bearing a broad median longitudinal smooth black band 34
- Pronotum without this band 42
34. Apical sutural elytral angle prolonged in a prominent rounded lobe; the marginal angle equally distinct 35
- This angle not prolonged in a lobe; the marginal angle effaced 36
35. The denuded postscutellar spot surrounded with small light spots *mucronatus* Gahan 1915.
- The postscutellar spot surrounded with small light spots
 *lictorius* Pasc. 1867.
36. Elytral apex bisinuate; between the sutural and apical angles an obtuse projection 37
- Elytral apex not bisinuate, without this projection 38
37. The postmedian and preapical elytral bands are narrow and yellowish *adpersus* Blanch. 1853.
- The bands greyish and broader *viridescens* Thoms. 1864.
38. Elytra without any yellow markings in the posterior half
 *florensis* Breun. 1948.
- Elytra with yellow markings in the posterior half 39
39. Elytra with only some small yellow spots in the posterior half *pseudosuperans* Breun. 1939.
- Each elytron with a transverse yellowish postmedian band, which descends to the lateral border 40
40. This band is rather broad *superans* Pasc. 1867.
- This band is very narrow 41
41. This band is suddenly angled; another band premedially in the shape of a large M *adpersarius* Breun. 1939.
- This band is slightly and regularly arced; no M-shaped premedian band *pseudoviridescens* Breun. 1939.
42. On each elytron a round discal distinct yellow or ochraceous spot 43
- Elytra without a similar spot 46
43. The light elytral spots not surrounded with dark pubescence; the apical elytral marginal angle not very prominent 44
- The light elytral spots distinctly surrounded with dark pubescence; the apical elytral marginal angle more prominent ... 45
44. The elytral suture with a single common yellowish spot a little behind the middle *septempunctatus* Boisd. 1835.
- The suture with two common yellowish spots, the postmedian rather larger, and a smaller one a little before the middle
 *octopunctatus* Gilmour 1949.
45. The postmedian sutural common elytral yellowish spot without

- a small oval spot laterally on each side *sexmaculatus* Breun. & De Jong 1941.
- This spot with a small distinct oval spot touching laterally on each side *novemmaculatus* Gilmour 1949.
46. On each elytron a small posthumeral lateral round whitish spot, but no premedian line or band 47
- Elytra always marked with yellowish or greyish-blue premedian line or band 48
47. Elytra with a postscutellar glabrous spot *trapezicollis* Heller 1914.
- Elytra without a similar spot *curvatolineatus* Auriv. 1927.
48. This band is a little broad, and rises obliquely towards the humerus 49
- This band is very narrow, and descends obliquely towards the lateral border, or is ring-shaped 50
49. On each elytron a distinct lateral round yellow spot, a little before the middle *separatus* Auriv. 1927.
- Elytra without this spot *ziczac* Breun. 1939.
50. This band rises as far as the suture *obliquelineatus* Breun. 1939.
- This band redescends close to the suture and forms with that of the other side a large M, or is closed again posteriorly ... 51
51. This band is rather vague 52
- This band is distinct 53
52. This band is yellowish *jaspideus* Boisd. 1835.
- This band is greyish-blue *vagejaspideus* Gilmour 1949.
53. The apex of the premedian band is placed close to the second external discal carina *mimethes* Kriesche 1926.
- The apex of the band is placed close to the internal discal carina *sepicanus* Kriesche 1926.

I have not seen the following species, described by BREUNING (1948, Bull. Mus. hist. nat. Belg. 24. (38). 33—6), and have been unable to place them conclusively in the above key: —

T. (A.) pseudagrarius Breun. (New Guinea) — close to *agrarius* Pasc.

T. (A.) geniculatus Breun. (Flores) — ? runs to 10. *seriemaculatus* Breun.

T. (A.) postflavescens Breun. (Japen Isl.) — ? runs to 31. *canofasciatus* Auriv.

T. (A.) laticollis Breun. (New Guinea) — ? runs to 21 or 27.